“Human – Wildlife interactions in the Sangay-Podocarpus Connectivity Corridor, Andes of Southern Ecuador: A socio-ecological and geographic characterization”

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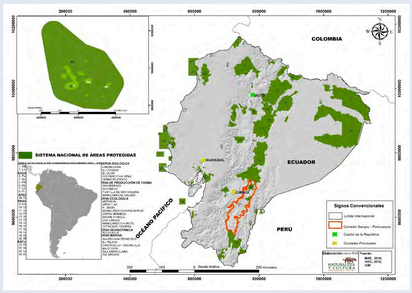
Study Site



The Sangay-Podocarpus Connectivity Territory (SPCC) is a multi-landscape region in the Andes of Southern Ecuador (red line). It encompasses 567,000 ha of territory, mostly national protected areas and local conservation areas, with some scattered human settlement inside, while several medium-sized towns are located around it.

The zone has importance for ecological services and to foster biologic populations connectivity; It has also been reported several issues relative to human-wildlife conflicts, particularly crop riding and attacks over domestic animals by carnivores.

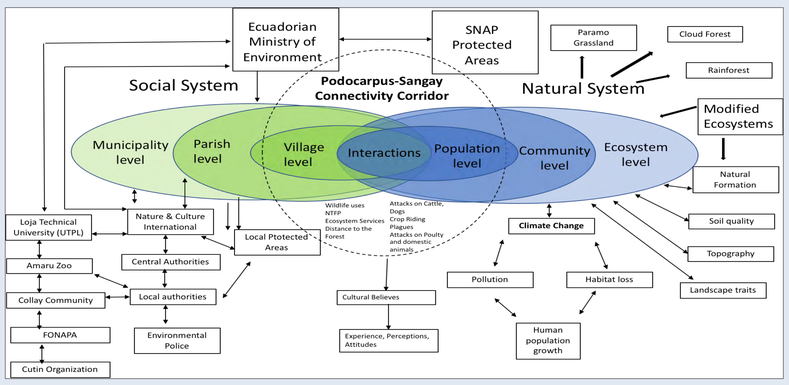
Objectives

Map out the geographical occurrence of different types of human-wildlife interactions in the PSCC

Enhance understanding of local people´s perceptions related to wildlife and protected areas presence and its influence on their livelihoods within the PSCC

Propose managerial interventions, agreed upon with different stakeholders present in the PSCC, with which to mitigate human-wildlife negative interactions.

Human-wildlife interactions

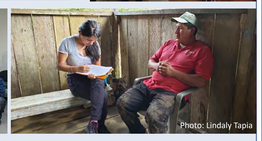


Methods

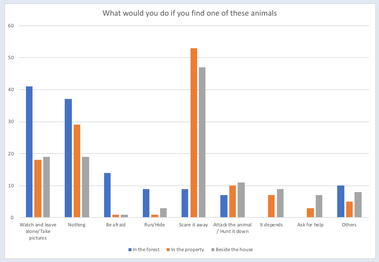
- Information gathering and socialization
- Focus groups
- Participatory mapping
- Training for Interviewers and trainers
- One-on-one interviews

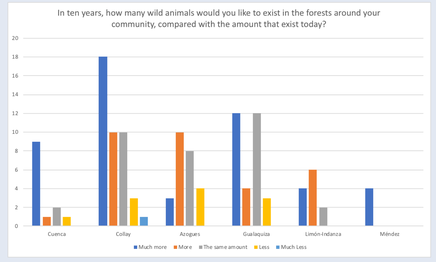
Zones of the SPCC covered and number of interviews per zone

Name	Zone	No. of interviews
Cuenca	1	14
Collay	2	43
Azogues	3	25
Gualaquiza	4	31
Limón-Indanza	5	12
Méndez	6	4
Total		**129**



Results

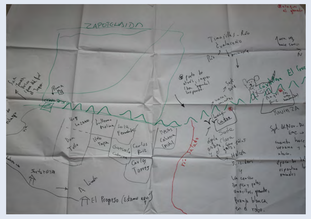


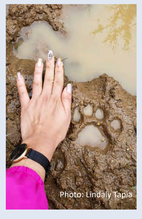


Most of the rural people interviewed have had experienced some level of interaction with wild animals. Even so, their attitudes towards native animals, protected areas, and ecosystems conservation were mainly positive (Figures). People`s perceptions about their territory have helped to identify zones of high wildlife prevalence, which are nearby protected areas and/or mountain tops (participatory mapping results, below).

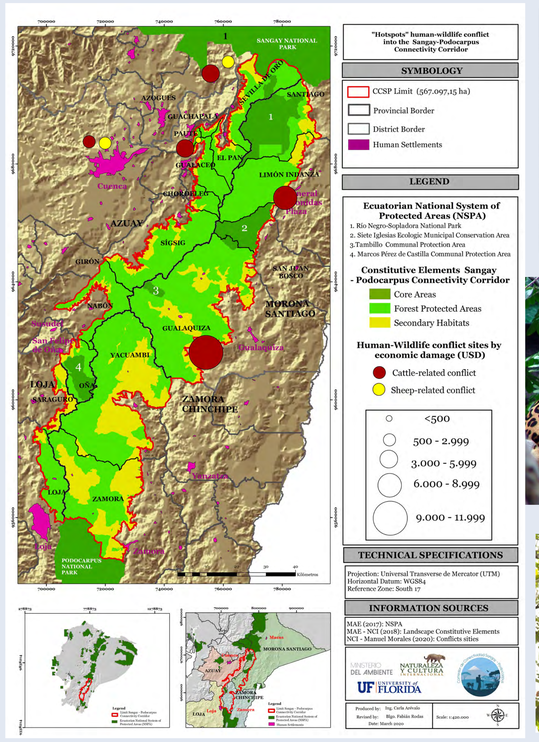
Negative interactions are of different types and include crop riding by small to medium-sized animals and attacks on cattle and domestic animals (sheep, poultry, pigs, among others). The most salient conflicts are those between humans and large carnivores attacking their herds.

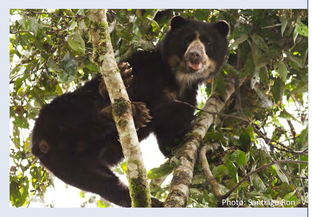
Wild animals involved were, among others, jaguars in the lowlands and spectacled bears in the highlands (map, top right). Other problematic animals identified were feral dogs, Andean fox, tayras, ocelots, opossums, and weasels.





Human-carnivore conflict zones





Conclusions

- The type and intensity of human-wildlife interactions are highly dependent on local productive systems, ecosystems, and cultural backgrounds, all of which interact in shaping the response to an actual or potential threat, such as crop-raiding, cattle attacks, or pest infestation.
- Most of the people support biodiversity conservation, although levels of tolerance tend to vary with the context.
- There are good practices for cattle-ranching, identified for the zone, that can be replicated, in order to avoid or diminish actual or potential conflict with wild animals.

Research Team

Research leader: Manuel Morales.
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Field Team: Fernando Juela, Lindaly Tapia, María Cristina Narváez & Nancy Tapia.
Maps and Logistics: Carla Arévalo.

Acknowledgements. This practicum was made possible through a grant from the Tropical Conservation and Development Program at the UF and the Center for Latin American Studies. Nature and Culture International - Ecuador served as host organization and successfully led the research in the field of which this project is a part. The Ecuadorian Ministry of Environment graciously coordinated the local and regional interventions and put all their resources to our service.